

CLAIMS

1. A low-calorie low-fat butter-flavored topping composition comprising more than about 50% by weight water and less than about 16% by weight fat, whereby the
5 composition exhibits between about 250-350% overrun.

2. The low-calorie low-fat butter-flavored topping composition of claim 1, whereby the composition is packaged in an aerosol container and the composition stands up for at least 10 minutes at room temperature after being emitted from the
10 aerosol container.

3. The low-calorie low-fat butter-flavored topping composition of claim 1, whereby the composition is packaged in an aerosol container such that operation of the aerosol container allows removal of over 90% of the composition.
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4. The low-calorie low-fat butter-flavored topping composition of claim 3 wherein the composition is pressurized with nitrous oxide.

5. The low-calorie low-fat butter-flavored topping composition of claim 1
20 further consisting essentially of:

- over 50% by weight water;
- between about 13-16% by weight fat;
- between about 10-16% by weight bulking agent;
- between about 1-5% by weight milk powder;
- 25 • between about 1-5% by weight protein; and
- less than about 1% by weight flavoring.

6. The topping composition of claim 5 wherein the protein is cheese whey or hydrogenated soy powder.

7. The topping composition of claim 5 wherein the bulking agent is starch hydrolyzates.

5 8. The topping composition of claim 5 wherein the bulking agent is a hydrolysed corn starch with a DE of about 10.

9. The topping composition of claim 5 wherein the fat is coconut fat.

10 10. The topping composition of claim 9 wherein the coconut fat has a melting point of about 92°F.

11. The topping composition of claim 5 wherein the flavoring is comprised of:

- 15
- about 46% by weight propylene glycol;
 - about 25.5% by weight lactic acid;
 - about 20.2% by weight acetoin;
 - about 4.2% by weight butyric acid;
 - about 2.6% by weight diacetyl;
 - about 0.8% by weight maltol; and
 - about 0.7% by weight gamma-nonalactone.

20 12. The topping composition of claim 5 wherein the composition consists essentially of:

- 25
- over 60% by weight water;
 - between about 14-15% by weight fat;
 - between about 12-14% by weight bulking agent;
 - between about 2-3% by weight milk powder;
 - between about 2-3% by weight protein; and
 - between about 0.03-0.06% by weight flavoring.

13. The topping composition of claim 13 wherein the composition consists essentially of:

- about 66% by weight water;
- about 14% by weight fat;
- 5 • about 12% by weight bulking agent;
- about 2.6% by weight milk powder;
- about 2.6% by weight protein; and
- between about 0.04-0.05% by weight flavoring.

10 14. The topping composition of claim 14 further comprising:

- less than about 1% by weight nonionic, lipophilic emulsifier;
- less than about 1% by weight nonionic, hydrophilic emulsifier;
- less than about 1% by weight other emulsifier;
- less than about 1% by weight lecithin;
- 15 • less than about 1% by weight cellulose gel;
- between about 1-2% by weight salt; and
- less than about 1% by weight coloring.

15 15. The topping composition of claim 14 comprising:

- 20 • about 0.37% by weight cellulose gel;
- about 0.297% by weight nonionic lipophilic emulsifier;
- about 0.053% by weight nonionic hydrophilic emulsifier;
- about 0.053% by weight lecithin;
- about 0.095% by weight other emulsifier;
- 25 • about 1.71% by weight salt; and
- about 0.03% by weight coloring.

16. The topping composition of claim 14 wherein the cellulose gel is microcrystalline cellulose, the nonionic lipophilic emulsifier is Duratan™ 60, the
30 nonionic hydrophilic emulsifier is polysorbate 60, the other emulsifier is monodiglyceride and the coloring is annatto.

17. The low-calorie low-fat butter-flavored topping composition of claim 1 consisting essentially of:

- over 40% by weight whole milk;
- over 25% by weight heavy cream;
- 5 • between about 10-16% by weight bulking agent; and
- less than about 1% by weight flavoring,

whereby the fat in the composition is provided by the whole milk and heavy cream.

18. The topping composition of claim 17 wherein the bulking agent is starch
10 hydrolyzates.

19. The topping composition of claim 18 wherein the bulking agent is a hydrolyzed corn starch with a DE of about 10.

15 20. The topping composition of claim 17 wherein the flavoring is comprised of:

- about 46% by weight propylene glycol;
- about 25.5% by weight lactic acid;
- about 20.2% by weight acetoin;
- 20 • about 4.2% by weight butyric acid;
- about 2.6% by weight diacetyl;
- about 0.8% by weight maltol; and
- about 0.7% by weight gamma-nonolactone.

25 21. The topping composition of claim 17 wherein the composition consists essentially of:

- over 50% by weight whole milk;
- over 30% by weight heavy cream;
- between about 11-13% by weight bulking agent; and
- 30 • between about 0.03-0.05% by weight flavoring.

22. The topping composition of claim 21 wherein the composition consists essentially of:

- about 52.8% by weight whole milk;
- about 33% by weight heavy cream;
- 5 • about 12% by weight bulking agent; and
- about 0.04% by weight flavoring.

23. The topping composition of claim 17 further comprising:

- less than about 2% by weight salt;
- 10 • less than about 1% by weight cellulose gel;
- less than about 0.5% by weight lecithin; and
- less than about 0.5% by weight coloring.

24. The topping composition of claim 23 comprising:

- 15 • about 1.7% by weight salt;
- about 0.37% by weight cellulose gel;
- about 0.05% by weight lecithin; and
- about 0.03% by weight coloring.

20 25. The topping composition of claim 23 wherein the cellulose gel is microcrystalline cellulose and the coloring is annatto.

26. A water-based low-calorie low-fat butter-flavored topping composition comprising:

- 25 • over 50% by weight water;
- between about 13-16% by weight by weight fat;
- between about 10-16% by weight bulking agent;
- between about 1-5% by weight milk powder;
- between about 1-5% by weight protein; and
- 30 • less than about 1% by weight flavoring,

whereby the composition exhibits between about 250-350% overrun.

27. The topping composition of claim 26 whereby the composition stands up for at least 10 minutes at room temperature after being emitted from an aerosol container.

5 28. A milk-based low-calorie low-fat butter-flavored topping composition comprising:

- over 40% by weight whole milk;
- over 25% by weight heavy cream;
- between about 10-16% by weight bulking agent; and
- 10 • less than about 1% by weight flavoring,

whereby the composition exhibits between about 250-350% overrun.

29. The topping composition of claim 28 whereby the composition stands up for at least 10 minutes at room temperature after being emitted from an aerosol
15 container.

30. The topping composition of claim 28 wherein the heavy cream has a fat content of about 38% and the whole milk has a fat content of about 3.2%.

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31. A method of preparing a water-based low-calorie low-fat butter-flavored topping composition, the method comprising:

- forming a first mixture by:
 - blending less than about 1 part cellulose gel with about ___-___ parts water to form hydrated gel;
 - mixing in about 1-5 parts milk powder;
 - mixing in about 1-5 parts protein;
 - mixing in about ___-___ parts water;
 - mixing in about 10-16 parts bulking agent; and
 - heating the first mixture to over 100°F;
- forming a second mixture by:
 - melting about 13-16 parts fat; and
 - mixing in less than about 1 part nonionic lipophilic emulsifier, less than about 1 part nonionic hydrophilic emulsifier, less than about 1 part lecithin and less than about 1 part other emulsifier into the fat;
- mixing the first mixture and the second mixture to form the composition;
- adding less than about 2 parts salt and less than about 1 part flavoring to the composition;
- pasteurizing the composition;
- cooling the composition to less than 50°F; and
- packaging the composition.

32. The method of claim 31 further comprising adding coloring to the composition before pasteurizing.

33. The method of claim 31 wherein the first mixture is heated to about 130°F and the composition is cooled to about 40°F before packaging.

34. The method of claim 31 wherein the cellulose gel is microcrystalline cellulose, the protein is cheese whey or hydrogenated soy powder, the bulking agent is starch hydrolyzates, the fat is coconut fat, the nonionic lipophilic emulsifier is Duratan™ 60, the nonionic hydrophilic emulsifier is polysorbate 60 and the other
5 emulsifier is monodiglyceride.

35. The method of claim 31 wherein the composition is packaged in an aerosol container such that operation of the aerosol container allows removal of over 90% of
10 the composition.

36. The method of claim 35 wherein the composition is pressurized with
nitrous oxide.

37. A method of preparing a milk-based low-calorie low-fat butter-flavored
15 topping composition, the method comprising:

- mixing more than 40 parts whole milk with less than 1 part cellulose gel;
- mixing in about 10-16 parts bulking agent;
- mixing in more than 25 parts heavy cream;
- mixing in less than 0.5 parts lecithin;
- 20 • homogenizing the resulting composition; and
- packaging the composition.

- 5 38. The method of claim 37 wherein the method comprises:
- heating the more than 40 parts whole milk to over 90°F;
 - mixing in the less than 1 part cellulose gel;
 - mixing in the about 10-16 parts bulking agent;
 - heating to over 120°F;
 - mixing in the more than 25 parts heavy cream;
 - mixing in the less than 0.5 parts lecithin;
 - heating to over 160°F;
 - while heating, mixing in less than 2 parts salt and less than 0.5 parts coloring;
 - after holding temperature above 160°F for 30 minutes, passing through a homogenizer at 1500 psi;
 - cooling to less than 90°F;
 - adding less than 1 part flavoring; and
 - 15 • packaging the composition.

20 39. The method of claim 38 wherein packaging the composition includes filling a container with the composition, injecting nitrous oxide into the container and shaking the container to disperse the nitrous oxide.

40. The method of claim 39 wherein the container is 14 ounces and the container is filled with 396 grams of the composition.

25 41. The method of claim 39 wherein the composition is packaged such that operation of the container allows removal of over 90% of the composition.

42. The method of claim 39 further comprising allowing the container to stand for 24 hours at 40°F.

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43. The method of claim 38 wherein the milk is initially heated to about 110°F; after mixing in the cellulose gel and bulking agent the mixture is heated to about 130°F; after mixing in the heavy cream and lecithin the mixture is heated to about 170°F and held at about 170°F for 30 minutes; and after passing through the
5 homogenizer the mixture is cooled to about 80°F.

44. The method of claim 38 wherein about 52.8 parts whole milk is heated to over 90°F, about 0.37 parts cellulose gel is mixed in, about 12 parts bulking agent is mixed in, about 33 parts heavy cream is mixed in, about 0.05 parts lecithin is mixed in,
10 about 1.7 parts salt is mixed in, about 0.03 parts coloring is mixed in, and about 0.04 parts flavoring is added.